

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ABSTRACT

A system that allows fresh air to be brought into a furnace as part of the return air circuit. This not only helps to replace stale air within a home, it also provides adequate air supplies to establish enough positive pressure within the dwelling to prevent air infiltration around windows, doors, forced air registers and around room perimeters of rooms along the baseboards. The system consists of a furnace that has a return air supply duct, an intake louver and filter for bringing fresh air into the system, an intake fan mounted to the intake, an intake duct that brings the fresh air from the intake louver to the furnace and a motorized damper, installed in the intake duct, to control the flow of air. These components are controlled by a control panel that works with the thermostat and furnace controls to operate the intake fan and damper as for optimum operation.